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APPLICANT: Robert J. Hauber et al)
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SERIAL NO: 09/997,446) Group Art Unit: 1732
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FILED: November 30, 2001) Examiner: Michael I. Poe
TITLE: METHOD OF MANUFACTURE OF GLASS REINFORCED GYPSUM
BOARD (As Amended)

AMENDED SPECIFICATION PARAGRAPHS

Please amend the first paragraph of the specification as follows:

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a divisional of U.S. Patent Application No. 09/875,733, filed on June 6, 2001, and issued on February 6, 2003 as U.S. Patent No. 6,524,679.

Please amend the last paragraph, starting at line 17, on page 14 as follows:

Gypsum slurry, and especially gypsum slurry that has been modified with polymer additives, has adhesive characteristics in its wet state that present some difficulty in handling. Accordingly, a film coating 43 is preferably provided on at least one of the roll coaters, preferably roll coater 42, which allows for easier continuous separation of the coater wheel surface from the surface of the wet gypsum surface while simultaneously depositing the majority of the gypsum slurry 38 on the mat of sheet 14. Materials for such a film coating surface include appropriate polymers, such as a Teflon® (polytetrafluorethylene, tetrafluoroethylene fluorocarbon, fluorinated ethylene propylene) coating, that are capable of providing a firm surface yet avoiding gypsum slurry adhering or clinging to the surface of the roll coater wheels.

Please amend the second paragraph, starting at line 8, on page 15 as follows:

To facilitate the transport of the bottom-facing sheet 14, including the weight of the dense slurry 38 and core slurry 44, a non-stick table deck 59 is disposed over the

surface 52 of table 50. Referring now to Fig. 2, which is a detailed view of Fig. 1, an upwardly facing surface 60 of table deck 59 provides a working surface for the production of gypsum board. Preferably, the table cover comprises a smooth, non-stick material, such as stainless steel, an elastomeric material, e.g., rubber, or a polymeric material, e.g., Formica® (melamine containing plastic laminate), and is of sufficient structural strength to support the moving weight of the slurry 44 deposited on the table 50.

Please amend the first paragraph on page 22 as follows:

Working in conjunction with the applicator wheel 140 is downwardly curved transversely extending directional plate 113, upon which the sheet 114 impinges as it exits from contact with the applicator wheel 140. The directional plate 113 is preferably mounted so that the apex 115 is adjacent or within the plane defined by the surface 118. This positioning causes the sheet 114 to be placed into tension as the applicator wheel 140 pushes the sheet 114 downwardly from the plane, which disposition assists in the penetration of the gypsum slurry 138 through the mat of sheet 114. To inhibit the formation of slurry 138 on the surface 142 of applicator wheel 140, an appropriate thin film coating 143, comprising, for example, a Teflon® (polytetrafluorethylene, tetrafluoroethylene fluorocarbon, fluorinated ethylene propylene) coating, may be optionally disposed on the surface of wheel 140, similar to the coating 43 of roll coater 42 described above.

Please amend the third paragraph, starting at line 19, on page 30 as follows:

For providing a smoother, non-stick surface 254, it may further comprise a Teflon® (polytetrafluorethylene, tetrafluoroethylene fluorocarbon, fluorinated ethylene propylene) coating on the underside of the second forming plate defined by the under surface of edger bar 250. Alternatively, the entire edger bar 250 may comprise a non-stick material such as Teflon® (polytetrafluorethylene, tetrafluoroethylene fluorocarbon, fluorinated ethylene propylene)

Please amend paragraph bridging pages 31 and 32 as follows:

Another difference with the edger bar assembly 98 is the omission of edge shoes. Instead, the edger bar assembly 298 includes disposing the Teflon® (polytetrafluorethylene, tetrafluoroethylene fluorocarbon, fluorinated ethylene propylene) flaps 320 at opposite ends of the edger bar 250, comprising a dimension in the range of from about 15 cm (6 inches) to about 180 cm (72 inches). The Teflon® (polytetrafluorethylene, tetrafluoroethylene fluorocarbon, fluorinated ethylene propylene) flaps 320 are disposed abutting the edge 95 of the gypsum board so as to form it in a squared or other geometrical figured edge. A Teflon® (polytetrafluorethylene, tetrafluoroethylene fluorocarbon, fluorinated ethylene propylene) material is preferred to provide a smooth surface that will not interfere with the continuous passage of the gypsum board in the direction of the arrow as shown in Fig. 9.

Please amend the last paragraph on page 36 as follows:

The surface texture of the front face of the completed gypsum board includes the polymer, which as a part of the underlying matrix, presents a smooth dense layer of gypsum to which other polymeric, e.g., acrylic, compounds can adhere. As the polymer layer cures, for example, in the drying process, it hardens to provide a stiff surface capable of retaining a load. The surface having the polymer additive, reduces chalking, improves water resistance and provides specific sites for chemical adhesion by other polymers. The composition of a water resistant or impervious coating can comprise one or a combination of the following polymeric compounds: polyacrylamide, polymethylacrylamide, polyvinylidene chloride (PVDC), Nylon® (polyamide), polyvinylchloride (PVC), polyethylene, cellulose acetate, ~~Bunyl Rubber~~ BUNA® Rubber (Nitrile Rubber), polycarbonate, polypropylene, polystyrene, styrene, butadiene, styrene butadiene copolymer, Neoprene® (polychloroprene), Teflon® (polytetrafluorethylene, tetrafluoroethylene fluorocarbon, fluorinated ethylene propylene) natural rubber poly (2, 6 dimethyl pentene oxide), poly 4, methyl pentene-1 and polydimethyl siloxane.